<u>In the Drawings:</u>

None

REMARKS

This amendment is in response to the Examiner's Office Action dated 10/21/2004. Claim 1 has been amended for clarification purposes without adding new matter. Reconsideration of this application is respectfully requested in view of the foregoing amendment and the remarks that follow.

STATUS OF CLAIMS

Claims 1-3 are pending.

Claims 1-3 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Dobbins et al. (USP 5825772).

OVERVIEW OF CLAIMED INVENTION

The present invention relates to a relay system performing packet relay between a plurality of network domains by changing addresses, thereby allowing packet communication with security, yet without setting a complicated filter between the domains. The presently claimed communication data relay system comprises a plurality of interface modules, a domain definition module, an inter-domain communication definition module, a routing information storage module, and a relay control unit. The plurality of interface modules are used to access the networks and the domain definition module defines the domain configured by the networks. The inter-domain communication definition module defines a communicability specification outlining if communication between the domains is permitted. The routing information storage module stores pieces of routing information indicating a relay destination (of data) in a way that separates the routing information for every domain. In the event data transfer is with respect to a

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given domain, the relay control unit controls the relay of communication data with reference to

the routing information storage module. In the event the data transfer is with respect to different

domains, the control unit judges whether communication between the domains is permitted and

relays communication data if such communication is permitted.

In the Claims

Claim 1 has been amended to clarify the present invention without adding new matter.

REJECTIONS UNDER 35 U.S.C. § 102(b)

Claims 1-3 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Dobbins et al.

(USP 5,825,772). To be properly rejected under 35 U.S.C. § 102(b), each and every element of

the claims must be disclosed in a single cited reference (i.e., the Dobbins et al. reference). The

applicant, however, contends that the presently claimed invention cannot be anticipated in view

of the Dobbins et al. reference.

Dobbins et al. teach a method of solving reachability of destinations located outside a

single Virtual LAN (VLAN) switch domain, wherein an edge switch can serve as the destination

located outside the domain. The method according to Dobbins et al. comprises the steps of: (a)

maintaining, in a switch, a directory of local mappings for access ports, or end systems attached

to the access ports, and remote mappings of end systems or access ports attached to other

switches; (b) accessing the directory to find a mapping, according to a destination address in the

first packet, upon receiving a first packet on an access port on a first switch; (c) forwarding a

resolve message from the first switch to other switches when a mapping is not found, wherein the

resolve message is a request for resolution from another switch according to the destination

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address in the first packet and, whereby, the first switch waits for a response to its forwarded resolve message prior to forwarding the first packet.

Regarding independent claim 1, the examiner states on page 3 of the office action that column 20, lines 42-65 of the Dobbins et al. reference teaches "an inter-domain communication definition module for defining communicability between domains". Applicant respectfully disagrees with the examiner's analysis as neither the citations nor the entire Dobbins et al. reference teaches or suggests such a limitation.

According to the present invention, the inter-domain communication definition table defines whether communication between domains is permitted. Based on such data, it is determined whether the transfer of a packet between a domain (to which the receiving interface belongs) and another domain (to which the destination interface belongs) is permitted, thereby allowing safe packet relaying between different domains. Such a limitation is neither taught nor suggested in the Dobbins et al. reference. For a better understanding of this limitation, the applicant respectfully directs the examiner to figure 1 (three domains) – accompanying description on page 21, lines 4-12; figure 4 (S4-S5, process for determining whether communication between domains is permitted or not) – accompanying description on page 27, lines 8-20 of the application-as-filed.

On page 3 of the office action of 10/21/2004, the examiner further states that the Dobbins et al. reference teaches a "routing information storage information module for storing pieces of routing information each indicating a relay destination of communication data in a way that separates the routing information for every domain." However, with the present invention, the

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routing information is separated and held per-domain among a plurality of domains, and it is efficiently decided as to which domain's routing information should be used as a reference by the interface where the packet enters and exits from (see, for example, figure 3 – destination domain routing table 20, figures 8-10, and page 19, line 13-page 10, line 1 of the application-as-filed). Dobbins et al. fails to teach or suggest the limitation of separating and holding the routing information on a per-domain basis (among a plurality of domains).

On the contrary, Dobbins et al. teach a configuration wherein each access switch holds the information of the end device connected to each switch as a local directory, and all local directories held by the respective switches constituting a single VLAN switch domain. However, Dobbins et al. fail to teach the determination of whether or not packet communication between the plurality of domains is permitted.

Hence, applicant contends that the Dobbins et al. reference merely teaches a method of solving the problem of reaching destinations outside a single VLAN switch domain, wherein an edge switch serves as the destination located outside the domain. However, conspicuously absent in the citations or the Dobbins et al. reference in its entirety is a teaching or suggestion for checking whether communications between a plurality of domains is permitted or not, wherein such checking is performed based on definitions in an inter-domain communication definition module (which specifies whether communication between domains is permitted).

Further, Dobbins et al. disclose in column 3, lines 2-6 that each switch holds the information of the end device connected to the switch with the local directory, and also mentions a "connection database 182" in column 20, lines 28-41 and figure 18. However, Dobbins et al.

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does not disclose or suggest the configuration of the present invention to separate and hold the routing information per domain of the plurality of domains.

Hence, applicant contends that Dobbins et al. fail to teach or suggest elements corresponding to "an inter-domain communication definition module for defining whether communication between domains is permitted or not" and "a routing information storage module for storing pieces of routing information each indicating a relay destination of communication data in a way that separates the routing information for every domain," and consequently, Dobbins et al. cannot provide the effect of transferring a packet between the plurality of domains with safety. Hence, Dobbins et al. neither anticipate nor render obvious the applicant's invention as disclosed in the pending claims.

The above mentioned arguments for independent claim 1 substantially apply for dependent claims 2-3 as they inherit all the limitations of claim 1.
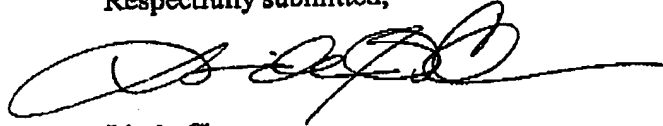

SUMMARY

As has been detailed above, none of the references, cited or applied, provide for the specific claimed details of applicant's presently claimed invention, nor renders them obvious. It is believed that this case is in condition for allowance and reconsideration thereof and early issuance is respectfully requested.

This amendment is being filed with a petition for extension of time. The Commissioner is hereby authorized to charge the petition fee, as well as any deficiencies in the fees provided to Deposit Account No. 50-1290.

If it is felt that an interview would expedite prosecution of this application, please do not

hesitate to contact applicant's representative at the below number.

Respectfully submitted,

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